Wild Fruits of Minnesota

A Field Guide

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To my grandpa, for planting the seed.
To Mom, for growing it.

Introduction

'Wild Fruits of Minnesota: A Field Guide' is designed to be used by those who are interested in botany, native plants and edible wild fruit. It can easily be treated as an educational tool for beginners as well as a handy guide for the more experienced. A limited amount of botanical terminology is used, but is helpful to learn when identifying plants to species level. While it can be used as a sole identification text for educated naturalists, cross referencing by using a dichotomous key is advised; especially important when identifying unfamiliar fruit which may be consumed. A hand lens and ruler are recommended when in the field as well to aid in identification.

Before consuming wild fruit, make certain that you are entirely confident of the exact species and all risks associated with it. Some wild plant species, which have been used for centuries by native peoples, have been found to contain mildly toxic chemicals. Caution should be used when dealing with plants that you may not be familiar with.

Organization

This guide is designed to assist in identifying fruit that you come across in the field. It is organized first, into four different ripening periods: Spring-early summer, Summer, Late summer, and Fall. This is done to narrow the possibilities of fruit type more quickly when looking for fruit during a certain time of the year. (The ripening periods for each species are identified by color in the upper right corner or the page.) After that, the different species are arranged alphabetically by genus. For seasoned botanists, or those of us who have spent significant time with flora of the upper midwest, narrowing species down to the genus level can be done relatively quickly. Once the genus is identified, you will be able to determine the species and related species effectively, simply using this guide. Once you get to know the guide and the species within each season, identifying will come more easily.

Species that have been combined under a single genus may have varying ripening times. Each genus has been put into the most likely ripening category but there will be slight species variances, as well as location and yearly climatic differences. Many species will be considered ripe earlier in the season, while continuing ripen or to be edible though the fall or even into the winter. Knowing the berry color when ripe is also important. It can help to determine ripeness of many species by observing other characteristics of the fruit, such as firmness. Those that are more difficult, such as fruit which ripens green, will take some extra work and experience to properly identify.

This guide isn't intended to be definitive at every level of identification. Some assumptions as to the users abilities are taken into account. Identifying aspects which are diagnostic are included whenever possible. Species which are similar but not determined to be edible are noted within the text. However, this cannot be considered exhaustive as each persons interpretation of what is similar, may be different. Caution should be taken to make sure all other species options are identified.

Fruit types

This guide contains wild, native or naturalized, edible "fruit". The proper definition of fruit is "the ripened ovary; the seed-bearing portion of the plant". By definition, this would include many of the plant species in Minnesota. The unscientific use of the term "fruit" in this guide refers to any fleshy, seed-bearing or related parts, derived from the female floral structure of a plant. This includes berries, pomes, drupes, drupelets, pseudocarps, cones, capsules, aggregates, etc., depending upon the species' amount of flesh and, of course, edibility. The species included is then open to interpretation, which is the decision of the author's alone.

Description of uses

There are many possible uses for edible fruit. Some possible uses are listed for each species, including: jams, jellies, sauces, tea, fresh eating, wine, dried fruit, spice and survival food. These categories help give you an idea as to how they can best be prepared or have been used historically. Imagination is really the limiting factor when you have tasty, wild fruit at your disposal.

The notes on each species' historical use in this guide is not comprehensive and is only intended to be used as interesting facts that should prompt additional inquiry.

Additional notes

All species described in this text are thought to be native or naturalized in Minnesota. Species without definitive evidence, such as herbarium specimens, of its establishment in the state, were not included. Species without definite information regarding positive edibility were also not included. That is to say, there may be information suggesting that additional species in Minnesota are edible but without a consensus of reliable information, those species could not be included. Species with edible plant parts but without edible fruit are also excluded from the guide.

There are many books, websites, and publications that have information regarding the present, historical and traditional uses of edible plants. After we learn to identify these species and where to find them we can rediscover their history and cultural significance. This will help to renew our appreciation for the diversity of plants in our state and the history that exists in our region as well.

Taken from Henry David Thoreau's 'Wild Fruits', this excerpt, referring to wild apples, could also be applied to Minnesota's abundant wild fruits:

> "*To appreciate the wild and sharp flavors of these October fruits, it is necessary that you be breathing the sharp October or November air. The outdoor air and exercise which the walker gets give a different tone to his palate, and he craves a fruit which the sedentary would call harsh and crabbed. ...What is sour in the house a bracing walk makes sweet. Some of these apples might be labeled "To be eaten in the wind*"."

Species Index - Alphabetical by scientific name

Spring-Early Summer Ripening

Amelanchier spp.	Serviceberry
Fragaria spp.	Strawberry
Lonicera villosa	Mountain fly honeysuckle
Morus alba	White mulberry
Rubus pubescens/R. arcticus ssp. acaulis	Dwarf raspberry

Amelanchier spp.

Serviceberry
Family: Rosaceae

Uses: Fresh eating, jams, jellies, wine. Delicious fruit (most species) which can be difficult to get to before the birds.

There are eight species of serviceberries in Minnesota. The fruit will vary in taste among species but having a similar appearance. The species range from small shrubs to small trees, 2-14m. Many of the *Amelanchier* species are rhizomatous, creating small colonies. Often found on forest edges, clearings and riverbanks. Deciduous leaves are simple and alternate. The leaf shapes will vary among species from ovate to elliptical to obovate. Margins will vary from sharply serrate to coarsely serrate with number of teeth per side being a helpful species indicator.
The fruit is a round, berry-like pome, 6-13mm in diameter, ripening from purple to black.

Species in MN: *A. alnifolia, A. arborea, A. bartramiana, A. humilis, A. interior, A. laevis, A. sanguinea, A. spicata.*

Notes: Although 'Juneberry' is another common name for the species, much of the ripening happens a bit later than that. (*A. spicata* ripens later than the other species in Minnesota, generally around mid– to late-summer.)

Fragaria spp.

Strawberry

Family: Rosaceae

Uses: Fresh eating, jams, jellies, wine. Smaller than cultivated varieties but generally more flavorful.

There are two species of strawberry in Minnesota, woodland (*F. vesca*) and Virginia (*F. virginiana*) strawberry. Both species are similar in appearance, although *F. virginiana* is more abundant. Virginia strawberry seeds will be embedded into flesh of the "fruit" while the woodland species will have the seeds on the surface of the flesh, similar to the commercial varieties.

Strawberry is a low-growing, stoloniferous, herbaceous plant, to 20cm tall. Leaves are coarsely toothed, trifoliate, growing at the ends of long, hairy stems.

The fruit is a red "berry" with an average length of 1-2cm. Strawberry is commonly found in disturbed areas, along streams and lakes and in open wooded areas. Spreading, creating clonal patches, often fruiting though the summer.

Notes: A strawberry as a whole is called an aggregate, accessory fruit. Aggregate refers to the seeds on the surface which are the actual fruit of the plant.

Lonicera villosa

Mountain fly honeysuckle

Family: Caprifoliaceae

Uses: Fresh eating but bitter, jams, jellies. Cooking is best suited for this fruit.

Mountain fly honeysuckle is seemingly the only edible species of honeysuckle in Minnesota. *L. villosa* is a low, upright, deciduous shrub to 1.5m tall. Bark is brown, thin, papery and exfoliating in strips. The leaves are simple, opposite, and elliptical to oblong, to 6.5cm long. The margins are entire, hairy; the upper surface of the leaf is covered with short (to 1mm), stiff hairs. The lower surface of the leaf is similar, but more densely hairy.

Fruit is made up of two fused ovaries, blue to black when ripe and 6-11mm long. Mountain fly honeysuckle is mostly found in swamps and other wetland areas in the northern part of the state.

Notes: *L. villosa* is similar in appearance to Swamp fly honeysuckle (*L. oblongifolia).* However, *L. oblongifolia* has shiny, red berries that ripen in mid - to late-summer. Swamp fly honeysuckle fruit is not considered to be edible.

Morus alba

White mulberry
Family: Moraceae

Uses: Fresh eating, jams, jellies, wine.
(As a precaution, avoid fruit from potentially contaminated sites.)

Notes: *Morus alba* is a non-native species. The native *M. rubra* was last documented in the state around the turn of the 20th century in extreme southeast Minnesota. *M. alba* does not appear to be invasive.

White mulberry is a deciduous tree, up to 15m tall. The leaves are simple, alternate and ovate. They will often be irregularly deeply-lobed. The leaves are from 5-13cm long and 3-9cm wide, with coarsely serrate margins, and is dark green on the upper surface. White mulberry bark is thin, rough and orange-tinted when young.

The fruit is an achene enclosed by the flesh, which is a calyx. The aggregate 'fruit' is a cylindrical syncarp, generally 1.5-2.5 cm long. The fruit is white when immature and turning red then black. Fruit may remain white or red when mature.

M. alba is most often found on disturbed sites and in abandoned urban areas.

Rubus pubescens/R. arcticus ssp. acaulis

Dwarf and Arctic dwarf raspberry
Family: Rosaceae

Uses: Fresh eating, jams, jellies, wine.

Notes: Dwarf raspberry can be mistaken for wild strawberry (*Fragaria spp.*) due to their similar low-growing nature. Fortunately, both fruits are very tasty.

Dwarf raspberry is a low-growing, deciduous shrub. It is mostly herbaceous, except for the oldest portion of the plant near the base. The stems are trailing and can reach 30cm tall. The leaves are alternate and ternately compound. The central leaflet is rhombic with a short petiolule, 3-8cm long and 2-5cm wide.

The fruit is an aggregate with red or dark red druplets. They are often found in clusters of 1-4 druplets. Each druplet reaching 5-12mm in diameter.

The Arctic dwarf raspberry (*R. arcticus ssp. acaulis)* is a very similar species but without long runners and having blunter leaflets. It is found only in the northern portion of the state where it may ripen mid-summer.

Summer Ripening

Comandra umbellata	Bastard toadflax
Cornus canadensis	Bunchberry
Gaultheria hispidula	Creeping snowberry
Oxycoccus macrocarpus/O. quadripetalus	Cranberry
Prunus pensylvanica	Pin cherry
Prunus pumila/P. susquehanae	Sand cherry
Prunus serotina	Black cherry
Prunus virginiana	Chokecherry
Rhus hirta/R. glabra	Sumac
Ribes spp.	Gooseberries
Ribes spp.	Currants
Rubus allegheniensis	Common blackberry
Rubus chamaemorus	Cloudberry
Rubus idaeas v. strigosus/R. occidentalis	Raspberry
Rubus satis	Dewberry
Rubus wisconsinensis	Bristleberry
Shepherdia canadensis/S. argentea	Buffaloberry
Viburnum edule	Squashberry
Vitis riparia/V. aestivalis	Wild grape

Comandra umbellata

Bastard toadflax

Family: Santalaceae

Uses: Fresh eating. Fruit is sweet when young; avoid when browning. May be useful as a jam if found in abundance.

Notes: Bastard toadflax is a northern representative of the santalaceae or sandalwood family which is a family of semi-parasitic plants.

Bastard toadflax is a small, erect, herbaceous perennial generally 10-30cm in height, up to 40cm. Leaves are deciduous, alternate, lanceolate and thick; approximately 2-5cm long and 5-10mm wide. The leaf margins are entire, the leaf blades are glabrous and have a prominent midrib on the lower portion. May grow in large colonies.

The fruit is an urn-shaped drupe with persistent sepals, 5-10mm in diameter and green when ripe. The inflorescence is a panicle-shaped cyme, or with multiple umbels.

Comandra umbellata is often found in meadows, prairies, dry, open woodlands or edges.

Cornus canadensis

Bunchberry

Family: Cornaceae

Uses: Fresh eating survival food. Mealy and bland tasting. Could be used in jams.

Notes: Somewhat resembles the common Canada mayflower (*Maianthemum canadense*). Easily identified by the number of leaves (1-3) versus 4-6 for *C. canadensis.*

Bunchberry is a low-growing perennial herb. Generally grows to 10-20cm tall. Leaves (4-6) are deciduous, opposite, almost whorled, and rhombic to obovate blades. Multiple veins start at base and meet at tip of leaf, as with other dogwood species.

The fruit, a cluster of drupes, are borne on the end of a vertical stalk. Each drupes grows to 5mm in diameter and ripens red in the summer.

Bunchberry is most often found in moist wooded areas. Can be abundant in coniferous forests. Prefers cool, moist soils.

Gaultheria hispidula

Creeping snowberry
Family: Ericaceae

Uses: Fresh eating, jams, tea. A distinct wintergreen taste, making identification easier. Should be consumed in small quantities. See Notes*

Creeping snowberry is a dwarfed, evergreen, vine-like shrub. Stems reach 50cm long and have stiff bristle-like hairs. Leaves are simple and alternate with entire margins. Leaf size ranges from 5-9mm long and from 3-7mm wide. Fruit is a white, egg-shaped berry getting 4-7mm in diameter. The fruit is covered with fine hairs.

Gaultheria procumbens (wintergreen) is the other native *Gaultheria* to Minnesota and is also edible. (See pg. 23)
Both species' are found in the northeastern portion of the state, preferring bogs and other low-nutrient, highly acidic sites. *G. hispidula* forms mats by rooting at nodes along the stem.
The common snowberry (*Symphoricarpos albus*) is a shrub in a different genus and the berry is not edible.

Notes: Both species' of *Gaultheria* contain a compound called methyl salicylate, which is similar to aspirin. While this chemical gives the plant its minty flavor, people who are sensitive to aspirin should avoid consuming *Gaultheria*.

Oxycoccus macrocarpus/O. quadripetalus

Cranberry
Family: Ericaceae

Uses: Fresh eating, jams, jellies, wine.

There are two species of cranberry in Minnesota. Large cranberry (*O. macrocarpus*) and small cranberry (*O. quadripetalus*). The only significant differences in the two species other than the length of the stems are the leaf size and shape. *O. macrocarpus* leaves are 9-16mm long, narrowly oval and have a rounded tip.
O. quadripetalus leaves 7-10mm long and lanceolate with an acutely tapered tip. Leaves are evergreen, stems are creeping, ascending to 15cm tall.
Cranberry fruit is a globose berry and red when ripe. Common in Minnesota, cranberry is found in bog ecosystems in the central to northeastern portion of the state.

Notes: Large cranberry fruit is slightly larger (10-16mm in diameter) than small cranberry (7-12mm). Large cranberry (*O. macrocarpus*) is the wild version of the cultivated variety.

Prunus pensylvanica

Pin cherry

Family: Rosaceae

Uses: Fresh eating*, jams, jellies, wine.
Seeds should not be consumed unless frozen and cooked to breakdown toxic compound.

A small tree to 10m tall. Bark is smooth with obvious lenticels. Leaves are 5-9cm long, and 2-4cm wide, simple, alternate and ovate to elliptical in shape. The leaf margins have a single row of fine serrations. The upper surface of the leaf is glabrous while the underside is hairy along the midvein.
Fruit is a single-seeded drupe in umbel-like clusters. They are shiny red when ripe and 5-8mm in diameter.

P. pensylvanica can be found in the understory of an opened canopy forest. They are present throughout most of Minnesota, excluding the far southwest prairie region. Responds quite well to disturbances in forest ecosystems, e.g. logging, fire.

Notes: These small trees are attractive in the spring when they are in bloom. Can be mistaken for the serviceberries because of the umbel-shaped inflorescence. The lenticels on the bark are diagnostic. Most or all *Prunus spp*. contain hydrocyanic acid in the seeds, which is said to be toxic.

Prunus pumila/P. susquehanae

Sand cherry

Family: Rosaceae

Uses: Fresh eating*, jams, jellies, wine.
Seeds should not be consumed unless frozen and cooked to breakdown toxic compound.

Deciduous shrubs up to 1.7m tall. Bark is thin containing lenticels and becoming rough with age. Leaves are simple, alternate, elliptical or slightly obovate in shape and 3-6cm long and 1-2cm wide. Leaf margins are singly-serrated along the upper half or so of the leaf.
Fruit is a single-seeded drupe, black when ripe and 8-12mm in diameter.
P. susquehanae, Appalachian dwarf cherry, is a similar species growing in northeastern Minnesota. This species is somewhat smaller (to 1m tall), and has blunt-tipped, slightly wider leaves. Apparently tolerating more acidic soils due to its northeastern MN range, compared to *P. pumila* being mostly absent there.
Both species are found in sandy ecosystems such as sand dunes, shorelines and open, sandy prairies.

Notes: Both *P. pumila* and *P. susquehanae* are extremely drought tolerant. May be a good addition to a low-input urban landscape.

Prunus serotina

Black cherry

Family: Rosaceae

Uses: Fresh eating*, jams, jellies, wine. *Seeds should not be consumed unless frozen and cooked to breakdown toxic compound.

Large deciduous trees to 30m tall. Flat, scaly bark splits with ends turning out. Leaves are simple, alternate and mostly elliptical to oblong elliptical. Leaves are 6-12cm long and 2-5cm wide with singly-serrate, blunt-tipped margins. The underside of the leaf has rust colored hairs running along both sides of the midvein, which is diagnostic. This is a helpful characteristic to identify black cherry when it is young and hasn't yet developed a mature bark.

The fruit is a single-seeded drupe, 7-11mm in diameter, which becomes black when ripe. The fruit is borne on a long, 5-11cm, raceme, similar to that of *P. virginiana*.

P. serotina is a somewhat shade tolerant canopy or sub-canopy tree which grows in dry, upland areas in the hardwood region of Minnesota.

Notes: Black cherry trees can live to be more than 200 years old. Harvesting fruit, however, may be a bit easier on a younger individual likely nearby.

Prunus virginiana

Chokecherry

Family: Rosaceae

Uses: Fresh eating*, jams, jellies, wine. *Seeds should not be consumed unless frozen and cooked to breakdown toxic compound.

Small, deciduous trees reaching up to 8m, usually with multiple stems. Leaves are simple, alternate, and broadly elliptical to ovate. Leaves get up to 10cm and have fine serrations on the margins. Upper side of leaf is glabrous while underside has whitish hairs making it appear pale in color. There are a few glands on the petioles of the leaf.

The fruit is borne on a elongated raceme reaching 10cm long. A single-seeded drupe up to 11mm in diameter. The fruit will ripen dark red to blackish.

Notes: Chokecherry is found all over the state, generally on forest edges but also in less dense forest interiors, as well as along rivers and creeks.

Rhus hirta/R. glabra

Staghorn and Smooth Sumac
Family: Anacardiaceae

Uses: Tea, spice. Sumac is ground up and commonly sold as a spice which can be used on meats and fish. Smooth sumac may be more palatable due to a lack of hairs on the fruit.

Notes: Both species can be found growing together. They are found on forest edges or disturbed sites. Sumac is used as a colonizer for roadsides where it will spread clonally. Both species are relatively short-lived.

The two native sumacs in Minnesota are common and widespread. Sumac is a large shrub up to 11m. Stems get to 20cm in diameter. Leaves are pinnately compound and alternate with 9 to 27 leaflets each. Lanceolate leaflets are sessile with sharply serrate margins, to 13cm long.
The fruit is a single seeded drupe, borne on an erect, terminal panicle, a thyrse, to 19cm long. Ripening in summer, the fruit can be used well into the fall.
The two species, staghorn and smooth sumac, differ mainly in that *R. hirta* stems and fruit are covered with long hairs which can get up to 3mm long. In addition, *R. glabra* is generally smaller, to 6m versus 11m.

Ribes spp.

Gooseberries
Family: Grossulariaceae

Uses: Fresh eating, jams, jellies, wine.

Notes: No matter where you are in Minnesota, there will be a gooseberry species nearby. Swamp gooseberry (*R. hirtellum*) grows in wetter areas in the north and east, Missouri gooseberry (*R. missouriense*) grows in drier, more southern and western parts of the state.

Designated as the *Ribes* with 1-3 flowers per inflorescence, there are 4 native gooseberries in Minnesota. Gooseberries are small to midsize, deciduous shrubs reaching 2.5m tall and arching. Gooseberries will arch over or trail and root at the tips when in contact with the ground. Leaves are simple, alternate, and have 3-5 palmate lobes. Margins are serrated and often rounded. Leaves are 3-5.5cm long, depending upon species. Branchlets and stems are often bristly and/or hairy. Fruit is a pinkish to black berry, to 15mm in diameter. Berries are found growing singly or in clusters of up to 3. Prickly gooseberries have bristles when ripe. Species in Minnesota: *R. cynosbati, R. missouriense, R. hirtellum, R. oxycanthoides.* All species of *Ribes* in MN are considered edible.

Ribes spp.

Currants

Family: Grossulariaceae

Uses: Fresh eating, jams, jellies, wine. Skunk currant (*R. glandulosum*) is aptly named. Not the most delicious fruit of the currant species'.

The Currants make up the *Ribes spp.* with 2-18 flowers per inflorescence; there are 5 native species of currant in Minnesota. Medium-sized, deciduous shrubs, 1-2.5m tall with upright, arching or trailing stems. One species (*R. lacustre*) has bristly spines while the others are absent of spines or bristles on the stems. Leaves are simple, alternate and palmately lobed as with gooseberries. Margins vary from rounded teeth to pointed serrations. Leaves can get to 10cm wide (*R. triste*).

Fruit, a berry, will range from bright red to bluish or black. Up to 11mm in diameter, currants will likely be more abundant than gooseberries due to the size of the inflorescences. *R. lacustre* and *R. glandulosum* berries are covered with gland-tipped hairs while the others are smooth. Species in Minnesota: *R. lacustre, R. americanum, R. hudsonianum, R. glandulosum, R. triste.*

Notes: Currants are quite shade tolerant plants. Wild black currant (*R. americanum*) is the most common currant in Minnesota.

Rubus allegheniensis

Highbush blackberry

Family: Rosaceae

Uses: Fresh eating, jams, sauces, wine.

There are 9 species of blackberries native to Minnesota. All species tend to have upright growth, with large, sharp, broad-based prickles.

R. allegheniensis is a deciduous shrub to 3.7m. Canes are biennial, with sharp, broad-based prickles.

Leaves are palmately compound with 3-5 leaflets; the central leaflet is elliptical to ovate, to 13.5cm long. Leaf margins are serrate. Upper surface of the leaf is hairy and the lower surface is more densely hairy. The leaf petioles have hairs and broad-based prickles.

Fruit is an aggregate of black drupelets when ripe, to 15mm wide. Fruit is borne on a long cylindrical raceme, to 22cm, containing 7-25 flowers in spring.

Blackberries are generally found in dry, sandy woodlands or on forest edges.

Notes: The 8 other species of highbush blackberries in Minnesota: *R. acridens, R. ablatus, R. alumnus, R. canadensis, R. frondosus, R. quaesitus, R. recurvans, R. rosa.*

Rubus chamaemorus

Cloudberry

Family: Rosaceae

Uses: Fresh eating, jams, jellies, wine.

Small shrubs, deciduous, annual, lacking prickles or bristles, to 30cm tall. Leaves are simple, alternate, and leathery. The leaf petioles are somewhat hairy. Leaves have 3-7 lobes, are palmately veined, reaching 11cm long. Cloudberry has finely toothed margins.
The fruit is an aggregate with only a few drupelets. They ripen from yellow-pink and reach 2cm across. Fruit is borne singly on a mostly upright stem. The fruit turns from red to a yellow-amber color when ripe.
Cloudberry is highly rhizomatous. It is found in peat bogs in Northeastern Minnesota and is predominately an arctic species. It can also tolerate dense shade.
R. chamaemorus can be mistaken for *Ribes triste* or *Ribes glandulosum* because of the leaf shape. When they are not fruiting, cloudberry can be distinguished by its more rounded lobes.

Notes: Cloudberry is unique in that it is one of the only *Rubus* species in Minnesota with a simple leaf, versus the compound leaves of many other species.

Rubus idaeas v. strigosus/R. occidentalis

Wild red and Black raspberry

Family: Rosaceae

Uses: Fresh eating, jams, sauces, wine.

There are two species of raspberries in Minnesota, *R. idaeas v. strigosus* (red) and *R. occidentalis* (black). Red raspberry is a rhizomatous shrubs with stems up to 1.7m long with biennial canes, while black raspberry shrubs are also biennial with canes up to 4 m but are clonally propagated by tip-rooting. Leaves are palmately compound with 3 leaflets or pinnately compound with 5 leaflets. The center leaflet is elliptical to ovate, up to 12cm long (*R. occidentalis*). Leaf petioles have hairs and stiff bristles. Petioles on *R. occidentalis* lack hairs but may have a few larger prickles. Leaf margins are either singly or doubly serrate.
Fruit is an aggregate of black or red drupelets when ripe. Inflorescences of *R. idaeas* will have up to 8 fruits and *R. occidentalis* will have up to 15, but usually less. Black raspberry fruit will be slightly smaller than red raspberry fruit.

Notes: *R. occidentalis* is found mostly in the southern half of Minnesota while *R. idaeus v. strigosus* inhabits most of the state, excluding the far southwest.

Rubus satis
Dewberry
Family: Rosaceae

Uses: Fresh eating, jams, sauces, wine.

There are 6 species of dewberries in Minnesota. *R. satis* may be the most common of them. Dewberries in general have long stems, to 3m. The stems are arching or trailing along the ground. All dewberries are tip-rooting, and ripen mostly in mid-summer. *R. satis* has glabrous canes and broader based prickles than most dewberries. They have 3-5 palmately compound leaflets. Margins are sharply serrate and up to 15cm long. The petioles have a few small prickles. The lower portion of the leaf is quite soft due to many small hairs.
Fruit is an aggregate of black drupelets when ripe, on a relatively small cyme, up to 10 per inflorescence. The fruit shape is quite globose.

Notes: Dewberries are generally less common in Minnesota than other *Rubus* species. They are likely more susceptible to man-made disturbances such as agriculture and grazing, and more dependent upon natural ones, such as fire, for reproduction.

Dewberries in Minnesota: *R. ferrofluvius, R. ithacanus, R. multifer, R. plicatifolius, R. satis, R. steelei.*

Rubus wisconsinensis
Bristleberry
Family: Rosaceae

Uses: Fresh eating, jam, sauces, wine.

There are 12 species of bristleberries in Minnesota. Bristleberries tend to have small stems, to 1m. They do not usually tip-root, and the bristles are rarely stiff. *R. wisconsinensis* has, arching, glabrous canes, prickles, and palmately compound leaves with 3-5 leaflets. Leaf petioles are sparsely hairy and have strong prickles. Leaf margins are sharply serrate and a bit irregular.
Fruit is an aggregate of black, globose drupelets when ripe. Borne on a corymb, there may be up to 12 fruit per inflorescence but usually less.

Notes: *R. wisconsinensis* is isolated to the states of Minnesota, Wisconsin, Iowa, and Michigan. Much of the bristleberry populations are isolated to the central portion of the state.

Bristleberries in Minnesota: *R. dissensus, R. fulleri, R. groutianus, R. missouricus, R. regionalis, R. semisetosus, R. stipulatus, R. superioris, R. uniformis, R. vermontanus, R. wheeleri, R. wisconsinensis.*

Shepherdia canadensis/S. argentea

Russet and Silver buffaloberry

Family: Elaeagnaceae

Uses: Jams, jellies, wine, dried fruit, fresh eating. Historically used to make frothy creams, due to the presence of saponin. Fruit is bitter but will sweeten after frost.

Large, deciduous shrubs, to 3.2m tall. Branchlets are covered with reddish-brown scales, which become dull in color and eventually drop with age. Leaves are simple, opposite, covered with hairs and brown scales. Leaves are ovate to laceolate in shape and have a blunt tip. *Shepherdia* leaf margins are entire. *S. argentea* leaves are much more linear-lanceolate, to 7cm long. *Shepherdia* fruit is an achene, on a short spike inflorescence growing out of the nodes on the 2nd year wood. Often in groups of 3 or more, the berrylike fruit is globose, bright red when ripe, and up to 9mm.
Buffaloberry is a dioecious species, having male and female flowers on separate plants. Only female plants will bare fruit.
Flowers emerge in the spring before the leaves, and fruit will persist into the winter.

Notes: Soopolallie was the name that *Shepherdia* was given by the traders of the Pacific northwest in the 19th century. 'Soop' meaning soap, and 'olallie' meaning berry. It is derived from the indigenous languages from British Colombia, Oregon and Washington.

Viburnum edule

Squashberry

Family: Adoxaceae

Uses: Fresh eating, jams, jellies, wine.

Deciduous shrubs to 2m tall. The smallest *Viburnum* in Minnesota. Leaves are simple, opposite, with coarsely serrate margins, to 8cm long and wide. Early season leaves are 3-lobed while later developed leaves are smaller and not lobed at all.
Fruit, a single-seeded drupe, is borne on a rounded, lateral cyme, about 3cm across, emerging from lateral buds. Up to 12mm across, the fruit is dark red when ripe.
Found in the northeast corner of the state, *V. edule* is mostly an arctic species.

Notes: *V. edule* is also referred to as Mooseberry, likely due to the indigenous Cree nation's word for *V. edule,* Moosomin.

Vitis riparia/V. aestivalis

Riverbank and Summer grape

Family: Vitaceae

Uses: Fresh eating, jams, jellies, dried fruit, wine.

Notes: Wild grape may be confused with Canada moonseed (*Menispermum canadense*) which is toxic. However *M. canadense* leaves have entire margins and tendrils are absent.

Riverbank grape is a large, climbing, deciduous vine, to 25m. Exfoliating bark peels off in strips, more pronounced with age. Both species in Minnesota, as with other wild grapes, has tendrils used to climb, to 15cm, becoming woody. Leaves are simple, alternate, with long petioles, to 7cm. *V. riparia* leaves have 3 lobes, to 15cm wide, and have sharply serrate margins. *V. aestivalis* leaves are round toothed, up to 25cm wide, and the lower surface being grayer in appearance than that of *V. riparia.*

Fruit is borne on a hanging panicle to 10cm long. The fruit, a berry, is glaucous, bluish-black when ripe, to 12mm in diameter, *V. aestivalis* fruit is slightly smaller, to 9mm. Many berries per cluster.

V. aestivalis is found only in the southeastern tip of Minnesota while *V. riparia* can be found all over the state, excluding much of the far north. In disturbed areas or clearings, wild grape can become quite aggressive and shade out other native species.

Late Summer Ripening

Arctostaphylos uva-ursi	Bearberry
Crataegus spp.	Hawthorn
Elaeagnus angustifolia	Russian olive
Elaeagnus communata	Silverberry
Gaultheria procumbens	Wintergreen
Gaylussacia baccata	Black huckleberry
Maianthemum stellatum	Starry false Solomon's seal
Mitchella repens	Partridgeberry
Physalis virginiana	Ground cherry
Podophyllum peltatum	Mayapple
Prunus americanum	American wild plum
Prunus nigra	Canada plum
Rosa spp.	Wild rose
Rubus parviflorus	Thimbleberry
Sambucus nigra ssp. canadensis	American elderberry
Smilax spp.	Smilax
Sorbus spp.	Mountain ash
Vaccinium spp.	Bilberry
Vaccinium angustifolium/V. myrtillloides	Blueberry
Vaccinium vitis-idaea	Mountain cranberry
Viburnum trilobum	Highbush cranberry

Arctostaphylos uva-ursi

Bearberry, Kinnikinnick

Family: Ericaceae

Uses: Fresh eating as survival food. Mealy texture and not terribly flavorful. Some evidence suggests that **large doses may be harmful,** although leaves were used extensively in folk medicine.

Vining, evergreen shrub found in sunny, sandy, drier areas. Often found in mats, creating a groundcover. Generally stems will average around 15cm in height before they begin to trail, but can grow to a few feet long. They will eventually take root after they have reached the ground.

Leaves are simple, alternate, obovate to spatulate in shape, with entire margins. Leathery texture and shiny. No more than 3cm long.

The fruit is a red, small (6-12cm), rounded drupe borne on a short raceme, with a dry and mealy texture. Will persist into winter making it a notable survival food.

Notes: All bearberry lookalikes are also edible.

The name Kinnikinnick is a native American term for bearberry, meaning "that which is mixed" as the leaves were smoked with tobacco or other plants.

Crataegus spp.

Hawthorn

Family: Rosaceae

Uses: Fresh eating (smaller fruits more difficult), jams/sauces, similar to rose hips or crabapples.

Up to 12 native species of Hawthorn exist in Minnesota. Distinguishing between them unnecessary for determining fruit edibility. All species range in height from shrub to small tree (5.5 to 12m.). Leaves are simple, alternate, deciduous, finely to coarsely serrate, and varying shapes. Thorns can range from 1.5 to 10cm long and may be compound or simple. The fruit is a pome, 6-20mm in diameter, generally round or globose and red to maroon when ripe; excluding *C. douglasii* which ripens black.

Found in most parts of the state. Prefers full sun and well-drained soils. Often seen on forest edges.

Native Minnesota species: *C. calpodendron, C. chrysocarpa, C. douglasii, C. macracantha, C. macrosperma, C. mollis, C. punctata, C. submollis, C. succulenta.*

Notes: A thornless variety is used in the horticultural trade for its showy white flowers in spring and attractive fruit for wildlife.

Elaeagnus angustifolia
Russian olive
Family: Elaeagnaceae

Uses: Fresh eating, jams. Drier consistency but sweet. Potentially invasive so eat up.

Common nonnative species found on roadsides where it was planted for its salt and drought tolerance. Can be found naturalized in prairie ecosystems in western Minnesota. Native to east Asia.
Small trees, up to 10 meters, with rough, flaky bark. Simple, alternate, deciduous leaves. Lanceolate to narrowly lanceolate, entire margins, with stellate hairs creating the silver appearance. Leaves 4-8cm long.
The fruit is drupelike with silvery scales, up to 14mm long. Borne on clusters of 1-3 from the leaf axils.

Notes: Fruit ripens late summer. Astringent when underripe. Similar in appearance to a true olive, *Elaeagnus* is an entirely different species.

Elaeagnus commutata
Silverberry
Family : Elaeagnaceae

Uses: Fresh eating, dried. Some consider unpalatable but historically used by native tribes.

Native to northwestern Minnesota, Silverberry is found in open prairies or disturbed sites, but not aggressive. Clonally propagated, establishing thickets. Large shrub species usually around 1-2 meters tall. Leaves are simple, alternate and deciduous, 3-6cm long. Silver scales give leaves the silvery appearance. Leaves elliptical with entire margins. Stems gray to rust colored.
The fruit is a drupe, similar to Russian olive in appearance. Also covered in silvery scales, somewhat elongated, to 14mm.

Notes: Fruit can be abundant so spend some time if you find a decent size thicket.

Gaultheria procumbens

Wintergreen

Family: Ericaceae

Uses: Teas, fresh eating. Leaves are often used for tea but berries have a similar effect, more difficult to find however.

Found most often in northern coniferous and oak forests. Dwarf, evergreen, creeping shrub. Leaves are simple, alternate and clustered near the branch tips. 2-5cm long, dark green, shiny, glabrous, fragrant when torn or broken. Leaf margins have widely spaced serrations with bristles, distinguishing it from pipsissewa (*Chimaphila umbellata*), a similar looking species.

The fruit is a bright red berry. Berry has a strong flavor, 8-11mm in diameter, but a relatively low production of fruit.

Notes: Lookalikes are not toxic and fragrance is distinctive. Evergreen leaves and persistent berries make wintergreen a good survival and fresh trail option in the cold months.

Gaylussacia baccata

Black Huckleberry

Family: Ericaceae

Uses: Fresh eating, jams, jellies, wine.

A low, deciduous, woody shrub to about 1m. Often spreading from rhizomes, creating a groundcover. Generally found in pine dominated stands with low sunlight.

Leaves are simple, alternate, with hairy midribs and entire margins are hairy. Leaves are elliptical to ovate and up to 5.5cm long.

The fruit, a drupe to 8mm in diameter, is black when ripe and borne on lateral racemes.

Its range extends from the east coast of the U.S. to eastern Minnesota.

Black huckleberry can be distinguished from lowbush blueberry by the small, yellow dots on the leaves, more numerous on the underside.

Notes: Black Huckleberry is similar to blueberry in appearance but with larger nutlets or seeds, making them more difficult to eat fresh.

Maianthemum stellatum

Starry False Solomon's Seal
Family: Liliaceae

Uses: Best when cooked. May act as a laxative if eaten raw in larger amounts. Has a bittersweet taste and reportedly high in vitamin C.

Found in cool, moist forests. An herbaceous, arching, single stem plant, about .5m in height.
Leaves, up to 15cm long, are lance-shaped arising from a stem bending at each leaf axil. There are no leaf petioles and the leaves have distinct parallel veins.
The fruit is a capsule borne on a short raceme with multiple fruits. They are dark red when ripe.

Can be confused with *Maianthemum racemosum* which contains a greater number of smaller fruits on a single stalk. *M. racemosum* has a broader leaf and is generally a taller plant overall (up to 1m).

Notes: Resembles Common false Solomon's seal (*M. racemosum)* which is not considered edible. See description before consuming.

Mitchella repens

Partridgeberry or Twinberry
Family: Rubiaceae

Uses: Survival food. No desirable flavor qualities.
As Thoreau put it... "They are an insipid berry, more important to the eye than to the palate.".

A creeping, herbaceous plant found in acidic soils, peat bogs or along stream banks. Stems, rarely getting over 5cm in height, root at the leaf nodes. Leaves are simple, opposite, evergreen and vining. Leaves have a distinct light-colored midrib with entire margins.
Broad at the base, the leaves are generally no more than 2cm in length.
The fruit is a smooth drupe, less than 1cm across. The fruit is red when ripe and contains two "eyes". These are the result of 2 fused flower ovaries which then form a single fruit.

Notes: The only lookalikes for partridgeberry have opposite leaves opposed to alternate, making it more distinguishable when obvious "two-eyed" berries are not present.

Physalis virginiana
Virginia Groundcherry
Family: Solanaceae

Uses: Fresh eating, jams, sauces, dried fruit. Delicious, citrusy flavored fruit should be as common as raspberries in a garden landscape.

An herbaceous, perennial, and native plant. Grows up to 1.5 meters in height. Resembles Mexican tomatillo plant (and other *Solanaceae* species). Leaves are entire or toothed, bases taper to petiole and coarsely hairy on upper and lower surface, stems are hairless. Ovate to narrowly lanceolate. Found in drier, sandy sites, open woods or disturbed areas.
The fruit, a rounded berry contained in a papery husk, and yellow when ripe. The fruit (around 2cm in diameter) may fall before it is ripe but will remain in the husk.

Notes: All parts of the plant other than the ripe fruit are toxic. Avoid eating unripe fruit.

Other species of groundcherry exist in our region and all are edible, with one exception. Smooth groundcherry (*P. longifolia*), must be cooked prior to being eaten.
Other species: *P. heterophylla, P. pubescens.*

Podophyllum peltatum
Mayapple
Family: Berberidaceae

Uses: Fresh eating, jellies, juices. Citrusy flavor. *Do not consume unripe fruit.

An herbaceous, single-stemmed rhizomatous plant reaching up to .5m in height. Found in wooded areas in the southeast corner of Minnesota. Often growing in clusters due to their rhizomatous nature. Mayapple has large, palmately lobed leaves up to 30cm in diameter. The leaves have 5 to 9 lobes each which are coarsely toothed.
The fruit is a single, egg-shaped berry which can get to be 5cm long. The fruit is yellow when ripe and contains many small seeds. The plant may be confused with goldenseal (*Hydrastis canadensis*) but the fruit will not be.

Notes: *Unripe fruit is toxic. Do not eat fruit until completely yellow. The leaves may be dead or dying before the fruit fully ripens.

Prunus americanum

American wild plum
Family: Rosaceae

Uses: Fresh eating, jams, jellies, wine.

A tall, ubiquitous shrub or a small tree up to 6 meters. Spreading habit, suckering, and peeling bark.
The leaves are simple, alternate, and deciduous, up to 10cm long. Elliptical leaves are sharply serrated and generally glabrous with lower surface moderately hairy along the vein.
Fruit is a single-seeded spherical drupe, reddish to light purple and up to 3cm in diameter. Borne on umbels of 1-4, falling from the tree when ripe.
Found on edges of forested areas, open prairies, disturbed sites.

Notes: *P. americana* is a common horticultural species for its showy flowers in the spring, fast growth rate and its attractive spreading habit.

Prunus nigra

Canada plum
Family: Rosaceae

Uses: Fresh eating, jams, jellies, wine.

Canada plum can also be considered a large shrub or small tree. It is very similar to the American wild plum (*P. americanum*) in appearance (see above), however Canada plum is found primarily in wooded ecosystems versus prairie ecosystems. The two species do however have an overlapping range where the prairie and hardwood ecosystems meet.
Differences in the two species are limited but the most obvious is the shape of the leaf. *P. nigra* leaves are broader and have deeper and more blunt serrations along the margins.

Notes: The branches on both *P. nigra* and *P. americanum* often bear spines up to 5 or 6cm long.

Rosa spp.

Wild rose

Family: Rosaceae

Uses: Jams, jellies, dried fruit. The dried pulp can be milled into flour.
It is best to determine if the seeds contain bristles before consuming. Avoid seeds if necessary.

Notes: The pulp of rose hips is said to be quite nutritious and high in vitamin C. The flowers and buds are also edible parts of the rose plant.

There are at least 4 species of rose in Minnesota. Likely there are others that have escaped cultivation and may be naturalized to some degree. While there are differences among them, they will all have similar looking and tasting fruit.
Wild rose is a shrub ranging from 1 to 2.5m tall. Leaves are pinnately compound, alternate and deciduous. Leaflets range from 5-9 in number and margins are most often singly serrated. Stems on all roses in MN contain bristles but to varying degrees.
The fruit is a reddish, berrylike structure called a 'hip', which vary slightly in size and shape between species but all will contain the same edibility.
Species found in MN: *R. woodsii, R. acicularis, R. arkansana, R. blanda.*

Rubus parviflorus

Thimbleberry

Family: Rosaceae

Uses: Fresh eating, jams, jellies, dried fruit.

Notes: Thimbleberry can often be found in large disturbed areas, such as under utility lines or other clearings and may form large colonies.

Thimbleberry is closely related to raspberry species. They are found mainly in the western part of the U.S. but there is an isolated population in the northern great lakes area, including northeast Minnesota. In Minnesota, it tends to ripen later than other *Rubus* species.
R. parviflorus is a shrub which resembles raspberries in structure. The leaf blades are much larger than most raspberry species measuring up to 30cm (1ft.) long and wide. The fruit is an aggregate containing many more druplets per fruit than raspberry. The fruit is generally larger as well, up to 2cm across.

Sambucus nigra* ssp. *canadensis

American Elderberry
Family: Caprifoliaceae

Uses: Jams, jellies, wine. Most other parts of the plant are considered toxic, including the seeds. Elderflowers are sometimes used in wines as well.

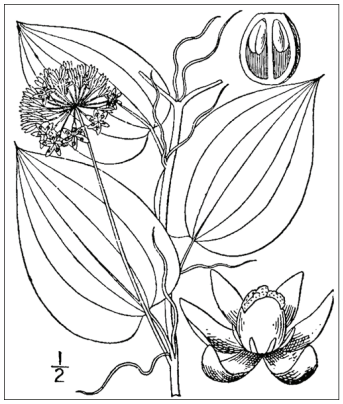
Notes: American, or common elderberry has tasty fruit when cooked. However, be careful not to consume red elderberry (*S. racemosa*) which is not edible. Red elderberry fruit is red and grows in round clusters.

American elderberry is a tall shrub (to 4m), usually with multiple stems. The leaves are pinnately compound, opposite and deciduous. The petioles are 3-7cm long and the leaflets (5 or 7) are ovate to elliptical, each 5-12cm long.
The fruits are drupelike berries on a flat-topped terminal cyme inflorescence, drooping when ripe. Each has 3-5 seeds, is 5-6mm in diameter and black when ripe in late summer.
American elderberry prefers sunny locations and limited competition from other fast-growing species. Often found in moist sites such as floodplains, streambanks, or marsh edges. Competes well in poorer soils.

Smilax spp.

Smilax or Carrion-flower
Family: Smilacaceae

Uses: Survival food. Fruit are considered edible but distasteful.



Notes: Drawing denotes common Smilax characteristics, e.g. leaf veination, seed, and flower type. (*Smilax herbacea* pictured)

Smilax ranges from an herbaceous, upright, low-growing plant to a woody vine reaching 8m tall. While there are a few different species in Minnesota, they are grouped here because of the low interest in consuming the fruit. The alternate leaves are approximately 7-13cm long, are broadly ovate to cordate and have several parallel veins. The black fruits (5-10mm each) are borne on rounded clusters, or umbels, on long, stiff, often upright stalks. Species include: *S. ecirrhata, S. herbacea, S. illinoensis, S. lasioneura, S. tamnoides, S. rotundifolia.*

Other fruits which *Smilax spp.* resembles in our range would be wild leeks (*Allium tricoccum*) and wild grape (*Vitis sp.*). Use caution when consuming, as *A. tricoccum* fruit is not considered edible.

Sorbus spp.

Mountain-ash
Family: Rosaceae

Uses: Jams, jellies, wine. Can be eaten raw after one or more frosts. Best when cooked.

Notes: The fruit will mature from late August to mid-September but will remain on the plant well into the winter. Many bird species depend upon the fruit for winter survival.

Sorbus spp. are tall deciduous shrubs or small trees up to 13m tall. The leaves are pinnately compound and alternate. The leaflets number from 11-19, dependent upon species. They are sessile, narrowly elliptical, and the native species' are approximately 4-8cm long and 1-2 cm wide with *S. aucuparia* having smaller leaflets.

The fruit is a subglobose pome, 5-12mm in diameter, dependent upon species. The fruit will be orange in the summer and will darken to orange-red when ripe.

There are two native species of mountain-ash in Minnesota, American (*S. americana)* and Showy (*S. decora)*. Both species are found mostly in the northern portion of the state. The European mountain-ash (*Sorbus aucuparia*) is naturalized in the U.S. and is found mainly in southeast Minnesota.

Vaccinium angustifolium/V. myrtilloides

Blueberries
Family: Ericaceae

Uses: Fresh eating, jams, jellies, sauces, wine, dried fruit.

Notes: *Vaccinium angustifolium* is the wild species of blueberry which is often harvested commercially in Minnesota.

There are two species of blueberry native to Minnesota, Sweet lowbush blueberry (*V. angustifolium*) and Velvet-leaf blueberry (*V. myrtilloides*). Both species are low-growing, deciduous shrubs. The leaves are simple, alternate and sessile, or nearly so. The leaves are 2-5cm long and approximately 1-2cm wide. The species' can be distinguished by the leaf margins. *V. angustifolium* has gland-tipped serrations versus *V. myrtilloides'* entire margins.

The fruit on both species is a globular blue or black berry, 6-10mm in diameter.

Blueberries can be found in most of the eastern portions of the state.

Vaccinium spp.

Bilberry

Family: Ericaceae

Uses: Fresh eating, jams, jellies, wine.

Notes: In addition to its smaller overall size, bilberry is distinguished from blueberry by its leaf axils being singly flowered or in pairs compared to the multi-flowered racemes of blueberries. This results in less fruit per plant.

There are two species of bilberry in Minnesota. Bilberry (*V. uliginosum*) is limited to the most northeastern county in the state but is quite common in Canada and Alaska. Dwarf bilberry (*V. cespitosum*) is more widespread in the state but less abundant than *V. uliginosum* across its range.

Bilberry is a low shrub, to 30cm and the dwarf species getting to 18cm tall. Both species are deciduous and have simple, alternate and sessile or nearly sessile leaves. Leaves are obovate to elliptical and glabrous. *V. uliginosum* margins are entire, while *V. cespitosum* margins have small serrations.

The fruit of both bilberry species is a globular bluish-black berry, 5-9mm in diameter. The berry is borne singly or in pairs in the axils. Dwarf bilberry fruit ripens a bit earlier, late July through August in Minnesota.

Vaccinium vitis-idaea

Mountain cranberry

Family: Ericaceae

Uses: Fresh eating, jams, jellies, wine.

Notes: Even though other wild fruits are more abundant, Lingonberries are quite popular in Minnesota due to the states Scandinavian roots.

Mountain cranberry or Lingonberry, as it is more commonly referred to in Europe, is found in all boreal regions of the world. It is a low-growing evergreen shrub, to 20cm tall. The leaves are simple, alternate and have entire margins. The leathery leaves are 1-2cm long and 4-8mm wide. They are generally glabrous on upper surface and are dull with bristly glands on the lower surface of the leaf.

The fruit is a round, dark red berry ranging from 7-10mm in diameter. They may persist into the winter. While mountain cranberry resembles the true cranberries, it grows upright compared to the trailing nature of cranberry.

Viburnum trilobum

American highbush cranberry

Family: Adoxaceae

Uses: Fresh eating, but astringent. Best in jams, jellies, wine.

V. trilobum is a common horticultural species in Minnesota for its attractive flowers in the spring, fall color and shade tolerance. It is underutilized as and edible fruit.

Highbush cranberry is a tall deciduous, multi-stemmed shrub, up to 5 m. The leaves are simple, opposite, and have a maple leaf-like shape. They are 3-lobed, 5-12cm long and wide and the margins are entire or coarsely serrate.

The fruit is a generally round, single-seeded drupe on a flat-topped lateral cyme-shaped inflorescence.

The European highbush cranberry (*V. opulus*) has become naturalized in Minnesota and is quite similar. The fruit is also edible but said to be more bitter than the native species. It is most easily distinguished by the concave glands at the base of the leaf on the petiole. The glands on *V. trilobum* will be convex and smaller. Highbush cranberry is a common Minnesota species due to its tolerance of many habitat types.

Fall Ripening

Aronia melanocarpa	Chokeberry
Berberis thunbergii	Japanese barberry
Celtis occidentalis	Hackberry
Empetrum eamesii ssp. atropurpureum	Crowberry
Juniperus communis v. depressa	Common juniper
Malus ioensis	Crabapple
Viburnum lentago	Nannyberry

Aronia melanocarpa

Chokeberry

Family: Rosaceae

Uses: Jams, jellies, wine. Fruit contains high levels of tannins which may make for a quality wine.

Notes: A common horticultural species, chokeberries may be more easily found in urban areas than growing in the wild.

Fruit contains more antioxidants than blueberries and is gaining popularity as a health food additive.

A deciduous shrub to 2.5m tall. Dark green leaves are alternate, simple, obovate to elliptical and up to 7.5cm long. Leaf margins are finely serrate and curving in at tips. Dark hair-like glands on the upper surface along the leaf midvein is diagnostic for chokeberry.

Fruit are borne on a compound cyme, often in clusters of 7 or more. Fruit is a black pome, 6-10mm in diameter.

Fruit will blacken by late summer but may be most palatable later into the fall. Waiting for the leaves to turn red is a good sign of ripeness.

While *Aronia* is the commonly used genus, *Photinia* is likely going to replace it in the future, and has, according the USDA Plant Database. Chokeberry will retain the 'melanocarpa' specific epithet.

Berberis thunbergii

Japanese barberry

Family: Berberidaceae

Uses: Fresh eating, jams, jellies, dried fruit, wine. Sour flavor; good addition to other juices.

Notes: Used as a common landscape species with many cultivars, it has become naturalized in Minnesota, likely moving from the eastern U.S.

An introduced species in Minnesota. Japanese barberry is found on the eastern portion of the state. A small shrub, to 2.7m. Young stems are reddish, grooved and have a thorn at the leaf nodes.

Leaves are deciduous, alternate, clustered (2-6 per node), simple, to 3cm long. The bluish-green leaves are obovate to elliptical, margins are entire.

The fruit, borne on an umbel shaped cluster, is an oblong to ovoid, shiny red berry when ripe. Berry will remain on the plant into the winter months, if not consumed by wildlife.

B. thunbergii is a highly drought-tolerant species which will grow in slightly shaded, open woodlands as well as disturbed sites and pastures.

Japanese barberry is an invasive plant in the eastern U.S. and has caused a serious decline in diversity in some forests. Similar outcomes should eventually be expected in Minnesota unless eradicated.

Celtis occidentalis

Hackberry

Family: Ulmaceae

Uses: Fresh eating.

May be impractical for anything other than a trail nibble due to large size of seed.

Notes: Fruit is not easy to collect in large numbers. They are somewhat fleshy and sweet, and can be found on the ground in early winter, when there is little else available.

Large deciduous tree to 30+ meters tall. Hackberry is found over much of the eastern United States. Bark is corky ridged when young and becoming scaly with age.

Leaves are simple, alternate, and ovate to lanceolate. Leaves have an obvious asymmetrical base and grow up to 12cm long.

The fruit , borne either singly or in pairs in the leaf axils and have a 1-2cm long pedicel. It is a round drupe getting to 12mm in diameter and turns reddish purple when ripe. Fruit is persistent, remaining on the tree well into the winter.

Empetrum eamesii ssp. atropurpureum

Purple crowberry

Family: Empetraceae

Uses: Fresh eating. This species is considered 'Endangered' in Minnesota. Harvesting of more than a few berries is not advised. Locations should be documented and reported if found.

A dwarf, evergreen shrub. Stems reach up to 80cm long, forming mats. Leaves are simple, alternate, linear, to 5mm long. Dark green leaves are glabrous with entire margins.
Fruit is a round drupe, borne singly in the leaf axils. Fruit is dark red to dark purple, to 7mm in diameter.

Purple crowberry grows only in the most northern corner of the state. Found only on sunny rock outcroppings on the Susie Island shorelines in Lake Superior. Some disagreement or confusion exists regarding the species of crowberry in Minnesota.

Notes: Black crowberry (*Empetrum nigrum*) may have existed in the state at one time. Others believe that the two species' are similar and may only be subspecies of each other. *E. nigrum* is generally an arctic species.

Juniperus communis v. depressa

Common Juniper

Family: Cupressaceae

Uses: Teas, spice. Using fresh or dried "berries" can add flavor to meats. Used to flavor gin. Reported to be a diuretic and may be an appetite stimulant.

Evergreen shrub, spreading, 6m across and up to 1.5m tall. Leaves are needle-like, to 18mm long, in whorls of 3, sharply pointed and have entire margins.
J. communis is dioecious, with both male and female cones. Male cones contain pollen, are composed of scales and are found in the leaf axils. The female seed cones are what appear berry-like. They are fleshy, mostly spherical, greenish, ripening to dark blue or black, up to 10mm in diameter.
The European variety *J. communis v. communis* is an upright tree of the same species.

Notes: Juniper berries, or seed cones, usually take 2 years to ripen. Harvesting dark colored berries in the fall is best.

Malus ioensis
Prairie crabapple
Family: Rosaceae

Uses: Fresh eating, jams, jellies, sauces, wine. Many *M. ioensis* cultivars are planted for their showy spring flowers, but the fruit need not be left solely for the birds.

The native crabapple in Minnesota. Small, deciduous trees, up to 6m tall. Leaves are simple, alternate, to 7cm long. The ovate to elliptical leaves have coarse and irregular serrations along their margins. Up to 3 shallow lobes on will be present on either side of the leaf, distinguishing the wild crabapple from other nonnative apples. Leaves and branches woolly when young.
Fruit is borne on a corymb of 1 to 5 pomes. The fruit is subglobose in shape and up to 4cm in diameter. *M. ioensis* fruit will remain green or partially green at maturity.

M. pumila or M. domestica is the domesticated apple species which is also abundant throughout the state.

Notes: Finding wild trees may be more difficult than harvesting from a planted crabapple cultivar in your friendly neighbors yard. *M. baccata v. baccata* is an introduced and likely naturalized crabapple in Minnesota.

Viburnum lentago
Nannyberry
Family: Adoxaceae

Uses: Fresh eating, jams, jellies, wine.

Tall, deciduous shrubs, often with multiple stems; up to 8m tall. Leaves are simple, alternate and on petioles up to 3cm. Leaf shape is ovate to elliptical and up to 10cm long, with finely serrate margins. Leaf petioles are flattened with wavy or wing-like serrations, distinguishing Nannyberry from lookalikes.
The fruit, a single-seeded drupe, is borne on a rounded, terminal cyme. Nannyberry fruits are elliptical in shape, up to 15mm long and dark blue to black when ripe. Ripening may not happen well into the fall, after the leaves start to turn.
Nannyberry can be found nearly all over Minnesota. In prairie sites, it can form large thickets.

Notes: Nannyberry fruit is one of the better *Viburnums* for fresh eating. Unfortunately the pit is relatively large, making them slightly difficult to consume in great numbers.

Glossary

achene	A dry, one-seeded fruit lacking special seams that split to release the seed.
aggregate	A fruit that consists of multiple ripened ovaries of a single flower, borne together on a common receptacle.
alternate	Only one leaf is attached to the branch at each node.
berry	An indehiscent fruit derived from a single ovary and having the whole wall fleshy.
branchlet	A small branch or the terminal or ultimate subdivision of a branch.
bristles	A stiff hairlike structure.
calyx	The sepals of a flower considered as a group; the outermost whorl of a flower.
clone	To reproduce or propagate asexually.
compound	A compound leaf has the blade fully divided into several leaflets.
corymb	A usually flat-topped flower cluster in which the individual flower stalks grow upward from various points of the main stem to approximately the same height.
cyme	A usually flat-topped or convex flower cluster in which the main axis and each branch end in a flower that opens before the flowers below or to the side of it.
deciduous	Plants on which all leaves fall at the end of every season of growth.
dioecious	Having the male and female reproductive organs borne on separate individuals of the same species.
drupe	A one-seeded, fleshy fruit with the seed inclosed in a stony wall.
drupelet	A small drupe, such as one of the many subdivisions of a raspberry or blackberry.
elliptical	A symmetrical form, broadest in the middle and narrower at the two equal curved ends.
entire	A leaf margin that is smooth without teeth or lobes.
evergreen	Plants on which leaves remain attached for more than one year.
genus	A taxonomic category ranking below a family and above a species and generally consisting of a group of species exhibiting similar characteristics.
glabrous	Hairless; not pubescent.
glandular	Having glands.
glaucous	Covered with a white, waxy material.
globose	Spherical; globular.
herbaceous	Relating to or characteristic of an herb as distinguished from a woody plant.
inflorescence	A structure that holds the flowers of a plant.
lanceolate	Tapering from a rounded base toward an apex; lance-shaped.
lateral bud	Buds developed along the side of a twig.
leaf axil	The upper angle between a lateral leafstalk, and the stem that bears it.
leaflet	An individual blade of a compound leaf.
lenticel	A corky spot on the bark which originally permitted air to enter the twig.
lobed	A segmented leaf having pointed or rounded extensions separated by sinuses that do not extend more than halfway to the midrib.
linear	Narrow and elongated with nearly parallel margins.

margin	The outer edge of a leaf blade.
native	Plant that originated in a particular place or region which it is found.
naturalized	A plant adapted or acclimated to a new environment; introduced and established as if native.
node	The point on a stem where a leaf is attached or has been attached; a joint.
obovate	Egg-shaped and flat, with the narrow end attached to the stalk.
opposite	Two leaves attached to the twig directly opposite one another.
ovary	The ovule-bearing lower part of a pistil that ripens into a fruit.
ovate	Broad and rounded at the base and tapering toward the end.
ovoid	Ovate but in three dimensions; egg-shaped.
palmate	A type of compound leaf in which the leaflets are attached to a common point.
panicle	A branched cluster of flowers in which the branches are racemes.
petiole	The stalk by which a leaf is attached to a stem.
pinnate	A type of compound leaf for which the leaflets are attached along both sides of an elongate central axis.
pome	A fleshy fruit, with seeds encased by a papery wall.
prickles	A pointed process arising from the outer layer of a stem, leaf, etc., and containing no woody or conducting tissue.
raceme	An inflorescence having stalked flowers arranged singly along an elongated unbranched axis.
rhizomatous	A horizontal, usually underground stem that often sends out roots and shoots from its nodes.
serrate	A leaf margin that has pointed teeth that are directed upward.
simple	An undivided leaf blade, though it may be lobed.
species	A taxonomic category ranking below a genus or subgenus and consisting of related organisms capable of interbreeding.
stellate	Arranged or shaped like a star; radiating from a center.
stoloniferous	Bearing or forming stolons. A shoot that bends to the ground or that grows horizontally above the ground and produces roots and shoots at the nodes.
subglobose	Not quite globose.
syncarp	A fleshy compound fruit composed either of the fruits of several flowers, or of several carpels of a single flower.
terminal	Growing or appearing at the end of a stem, branch, stalk, or similar part.
thyrse	A dense, paniclelike flower cluster in which the lateral branches terminate in cymes.
toothed	Of the margin of a leaf shape; having the edge cut or fringed or scalloped.
trifoliate	Having three leaves or leaflike parts.
umbel	A flat-topped or rounded flower cluster in which the individual flower stalks arise from about the same point.
whorled	Leaves occurring three or more at a single node.

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